

P-W

Kerr-McGee Oil Ind. Inc. 2
Hortensine
NE/4-NW/4 Sec. 21-T18N-R25E

63

County Apache
Area Pinta
Lease No. Hortenstein

Well Name Kerr-McGee Oil Ind. Inc. ^{line} Hortenstein #2

Location NE SE Sec 21 Twp 18N Range 25E Footage 660' FEL 1980' FSL
LE Spud Completed Total
Elev 5472 Gr 5478 KB Date 9-20-58 Abandon 9-24-58 Depth 540'
5479* 5509*

Contractor

**Log + spec. signs agree with HGS 7 1/2' gauge*

Drilled by Rotary X
Cable Tool

Casing Size 8 5/8 Depth 146 Cement 150

Production Horizon

Initial Production D & A

REMARKS

Elec Logs IE log (2)
Applic. Plugging Completion
to Plug X Record X Report X

Sample Log Am Strat
Sample Descript.
Sample Set T-1014 P-369
Core Analysis
DSTs

Water well accepted by

Bond Co. Fremont Ins. Co Bond # 5471020-52 BND 188 98 10-528
& No. American Casualty Co.

Bond Am't \$ 25,000 Canceled 10-24-68 Date Organization Report X

Filing Receipt 53777 Dated 9-16-58 Well Book X Plat Book X

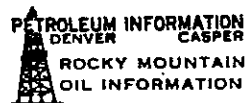
API No. 02-001-05042 Loc. Plat X Dedication All 21-18N-25E

Sample 369

Permit Number 63

Date Issued 9-15-58

63
ARIZONA
APACHE COUNTY
NINE MILE (W)



Twp 18n-25e
Section 21
c ne se

OPR: Kerr-McGee Oil Industries

WELL #: 2 Hortenstein

ELEV: 5509 KB.

*TOPS: Log-Synplex

Shinarump 212
Moenkopi 387
Cochino 516

DSTS. & CORES:

DST 524-540, 1-1/4 hrs,
rec 345 fluid - 45 mud
& 300 salt wtr, FP 170#,
SIP(15 min) 165#, HP
240#.

no shows

SPUD: 9-20-58

COMPL: 9-24-58

TD: 540

PB:

CSG: 8-5/8" @ 146 w/150

PERF:

BROD. ZONE:

INIT. PROD: D & A

KAN-W3-85229

Contr: Riley

STATE LAND DEPARTMENT
STATE OF ARIZONA

Form O&G 52

Form Prescribed Under Oil and Gas Conservation Act of 1951
WELL COMPLETION REPORT
(File in Duplicate)

Operator Kerr-McGee Oil Industries, Inc. Field Wildcat on 9 Mile Structure
Street P.O. Box 337 Pool _____
City Sumray State Texas County Moore
Lease Name Hortenstine #2 Well No. 2 Acres in Unit 640
Location 660' EEL and 1980' EEL, Apache County, Arizona
Sec. 21 Twp. 18N Rge. 25E
Elevation DF 5509 GR 5499 Electric Log Run SI ran ES Inductor 9-23-1958
Number of Crude Oil Producing Wells on this Lease, including this well _____
Has Authorization to Transport Oil or Gas from Well, Form O&G 57 been filed? _____

Dry hole, well plugged September 24, 1958
OFFICIAL COMPLETION GAUGE

Date Test Commenced 19 Hour M. Date Test Completed 19 Hour M
Length of Test _____ Hours _____ Minutes
For Flowing Well: For Pumping Well:
Flowing pressure on Tbg. _____ lbs./sq.in. Length of stroke used _____ inches
Flowing pressure on csg. _____ lbs./sq.in. Number of strokes per min. _____
Size tbg. _____ in. No. ft. run _____ Size of working barrel _____ inches
Size choke _____ in. Type choke _____ Size tubing _____ in. No. ft. run _____
Length _____ in. Shut in pressure _____
If flowing well, was this well flowed for the entire duration of this test
without the use of swab or other artificial flow device? _____ If jetted, used
_____ cu. ft. gas per bbl. oil. Result of this test (bbls. net oil per 24 hrs.)
(100% tank tables.)
Gas-oil ratio of this well is _____ cu. ft. of gas per bbl. of oil.
Per cent water produced during this test _____
Gravity of oil produced during this test (Corrected to A.P.I. 60° F)
Name of Pipe Line or other carrier _____
If perforated: No. Shots _____ From _____ To _____ Date Perforated _____
Date well Spudded 9-20 1958. Date Well Completed 9-25 1958
Top Pay _____ Ft. Total depth of well 540 Ft.

CASING LINER AND TUBING RECORD

String	Size	Wt./Ft.	Name and Type	Amount Ft. In.	Depth Set at	Perforated From To
Surface	8 5/8	28#	H-40	132	146	

CEMENT AND TESTING RECORD

Size of Hole	String	Where Cement Placed	No. Sacks of Cement	Method Used	Pressure Applied in Testing	Hardness of Cement Drilled	Type of Cement
12 1/4	8 5/8	Cir.	150		1000#	Good	Common

CHEMICAL OR SHOOTING RECORD BEFORE COMPLETION

Size	Chemical or	Quantity	Date	From	Depth to

AFFIDAVIT

I, Otto C. Barton, being first duly sworn on oath state that I have know-
ledge of the facts and matter herein set forth and that the same are true and
correct.

Representative of Company

Subscribed and sworn to before me this 17 day of October 1958
Moore County, Ariz. Notary Public
My Commission expires: 6-1-59 Texas

STATE LAND DEPARTMENT
STATE OF ARIZONA
Form Prescribed Under Oil and Gas Conservation Act of 1951

Form O&G 56

ABANDONMENT AND PLUGGING RECORD

(Within thirty days after the plugging of any well has been accomplished, the owner or operator thereof shall file this form with the Commissioner, setting forth in detail the method used in plugging the well.)

PLUGGING METHODS AND PROCEDURE-- The methods and procedure for plugging a well shall be as follows: (a) The bottom of the hole shall be filled to, or a bridge shall be placed at, the top of each producing formation open to the well bore, and in either event a cement plug not less than fifty (50) feet in length shall be placed immediately above each producing formation open to the well bore when ever possible.

(b) A cement plug not less than fifty (50) feet in length shall be placed at approximately fifty (50) feet below all fresh-water-bearing strata.

(c) A plug shall be placed at or near the surface of the ground in each hole.

(d) The interval between plugs shall be filled with heavy-mud-laden fluid.

(e) An uncased hole shall be plugged with heavy mud up to the base of the surface string, at which point a plug of not less than fifty (50) feet of cement shall be placed.

Operator Kerr-McGee Oil Industries, Inc. Field wildcat on 9 mile Structure
Pool _____
County Apache
Address all correspondence concerning this form to: Otto C. Barton
Street: P.O. Box 337 City: Sunray State: Texas
Lease Name Hortenstine Well No. 2 Sec. 21 Twp. 18N Rge. 25 E
Date well was plugged 25 September, 19 58
Was the well plugged according to regulations of the Commissioner? Yes
Set out method used in plugging well and record of casing pulled: Filled hole

with heavy drilling mud and with cement plugs as follows: 20 sx. at 540' to 480'.

20 sx. at 400' to 340'.

10 sx. top of 8 5/8" surface casing

Total 50 sx. cement.

No casing left in hole (set 132' of 8 5/8". Cemented w/150 sx., circulated to surface and left in hole).

(AFFIDAVIT)

Texas
STATE OF ARIZONA Sunray
COUNTY OF Moore

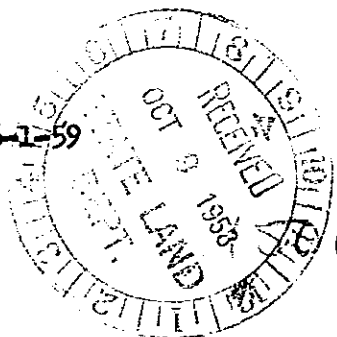
[Signature]
(Operator)

Before me, the undersigned authority, on this day personally appeared Otto C. Barton, known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is authorized to make this report and has knowledge of the facts stated herein and that said report is true and correct.

Subscribed and sworn to before me this the 7 day of October 19 58

Mickey Little
Notary Public

My commission expires: 6-1-59



OK 10-9-58
[Signature]

STATE LAND DEPARTMENT
STATE OF ARIZONA

Form O&G 55

Form Prescribed Under Oil and Gas Conservation Act 1951
APPLICATION TO ABANDON, PLUG, DEEPEN, SIDETRACK OR PERFORATE

(After Well Has Once Been Completed)

INSTRUCTIONS: -- File in duplicate with Commissioner. One copy will be returned with approval or denial.

FIELD: Wildcat on 9 mile Structure
OPERATOR: Kerr-McGee Oil Ind., Inc. ADDRESS Oklahoma City 2, Oklahoma
LEASE: Hortenstine WELL NO. 2 COUNTY Apache
SURVEY: T18N, R25E SECTION 21 DRILLING PERMIT NO.:
LOCATION: 660' FEL and 1980' FSL of Section 21, 18N, 25E, Apache County, Arizona

TYPE OF WELL: Dry Hole TOTAL DEPTH 540'
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned) None (Dry Hole)
LAST PRODUCTION TEST: OIL (Bbls.) Water (Bbls.)
GAS (M.C.F.) DATE OF TEST

PRODUCING HORIZON None PRODUCING FROM: TO

1. COMPLETE CASING RECORD: Set 132' of 8 5/8" OD, 28#, H-40, R-2, ST&C Casing.
Cemented with 150 sx. common cement. Cement circulated to surface.

2. FULL DETAILS OF PROPOSED PLAN OF WORK: will fill with heavy drilling mud and
cement plugs as follows: 20 sx. at 540' to 480'.
20 sx. at 400' to 340'.
10 sx. top of 8 5/8" surface.

Total 50 sx. Common Cement

If the well is to be deepened to another zone other than that covered by permit, this form shall be accompanied by a certified lease plat as is prescribed on Form No. O&G 51.

If well is to be abandoned, does proposed work conform with requirements of Rule 26? Yes. If not, outline procedure proposed above.

DATE COMMENCING OPERATIONS: 25 September 1958
NAME OF PARTY DOING WORK: Halliburton ADDRESS Farmington, New Mexico
CORRESPONDENCE SHOULD BE SENT TO: Kerr-McGee Oil Industries, Inc.

Box 337, Sunnyvale, Texas

NAME: [Signature]

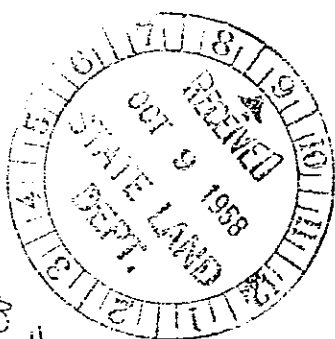
TITLE: District Supt.

APPROVED: _____ DAY OF _____ 19____.

DENIED: _____ DAY OF _____ 19____.

STATE LAND COMMISSIONER

BY: _____



15063

OK. 10-9-58
BNG

STATE LAND DEPARTMENT
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

This notice and surety bond must be filed and permit
must be granted before drilling begins

State Land Commissioner Navajo Ariz. 3 September 1958

In compliance with Statewide Rule 3, notice is hereby given that it is
our intention to commence the work of drilling well No. (B-1) #2 Sec. 21,

Twp. 13N, Rge. 25E B. & M., Wildcat on 9 mile structure Field,
Apache County.

Legal description of lease HORTENSTINE B-1, C NE SE Section 21, 13N, 25E, Apache County,
(attach map or plat to scale)

Arizona

Location of Well: 550' FSL and 1930' FSL of Section 21, 13N, 25E, Apache County, Arizona.
(Give exact footage from section corners or other

legal subdivisions or streets)

Proposed drilling depth 800 feet. Acres in drilling unit 640

Has surety bond been filed? yes. Is location a regular or exception to
spacing rule? regular.

Elevation of ground above sea level 5509' Kelly bushing.
5499' GL feet.

All depth measurements taken from top of Kelly bushing
(Derrick, floor, Rotary Table or

which is 10 feet above the ground.
(Kelly Bushing)

PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight	Grade & Type	Top	Bottom	Cementing Depths
8 5/8"	28#	H-40 ST&C	GL	150'	150'
5 1/2"	14#	J-55 ST&C	GL	800'	800'

Intended Zone or Zones of completion:

Name Coconino Perforated Interval unknown

AFFIDAVIT:

I hereby certify under the penalty of perjury, that the information
contained and statements herein made are to the best of my knowledge and
belief, true, correct and complete.

Kerr-McGee Oil Industries, Inc.
(Applicant)

By David E. Smith

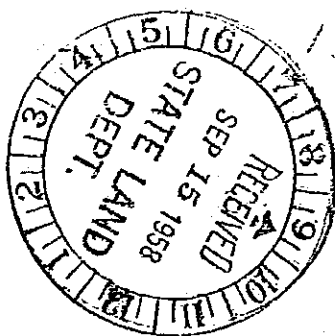
Application approved this 15 day of September 19 58

Permit No. 63
3-62 1/10/58

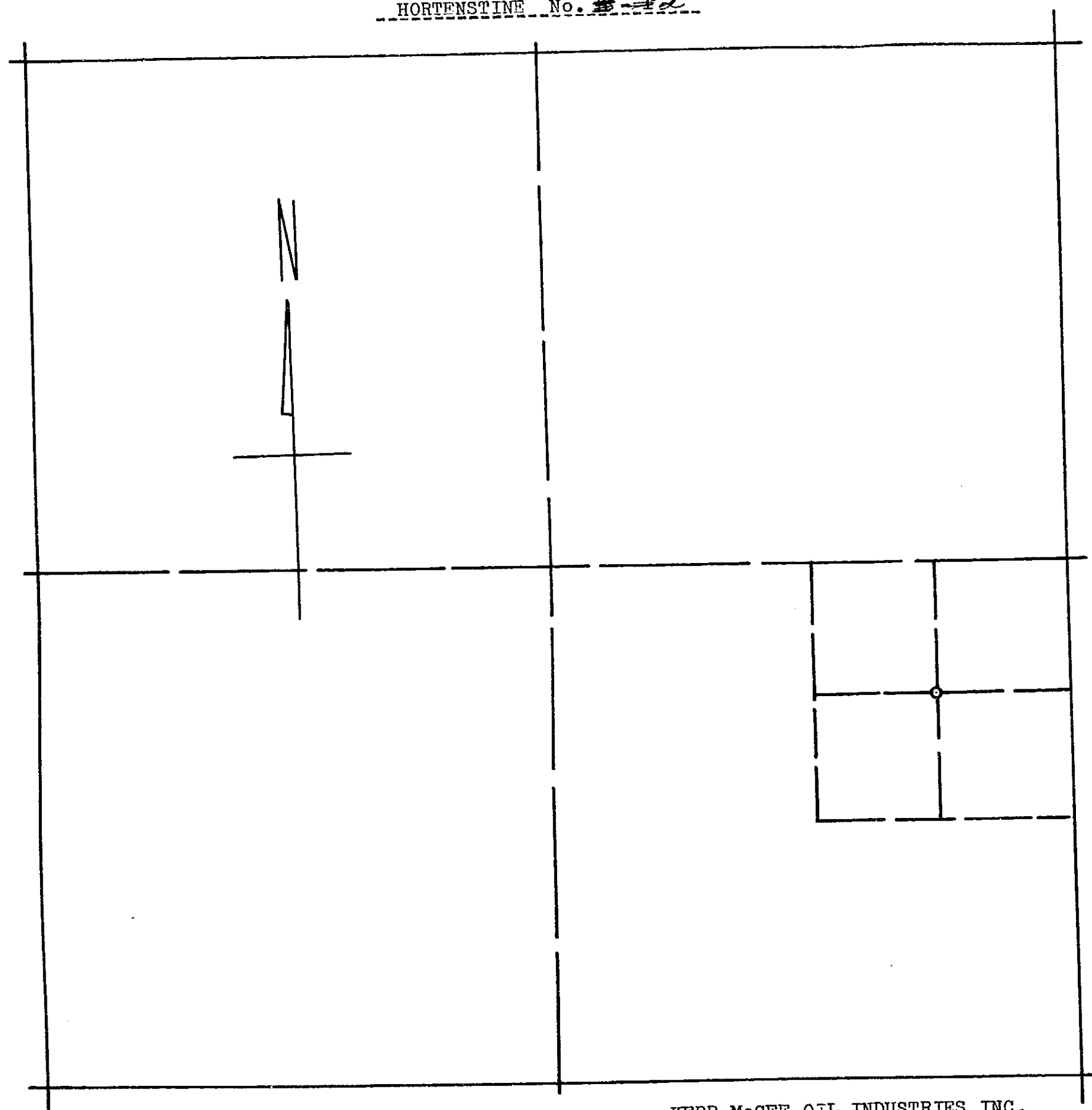
Obed M. Larsen
State Land Commissioner

OK. 9/10/58 P.M.J.

13541



HORTENSTINE No. 2



KERR MCGEE OIL INDUSTRIES INC.
Oklahoma City, Oklahoma.

Plat showing well location, situate
at the center of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec.
21, T18N, R25E G&SRB&M, Apache County,
Arizona.
Elevation = 5499 feet.

Surveyed by *Lacy C. Greer*
August 31, 1958

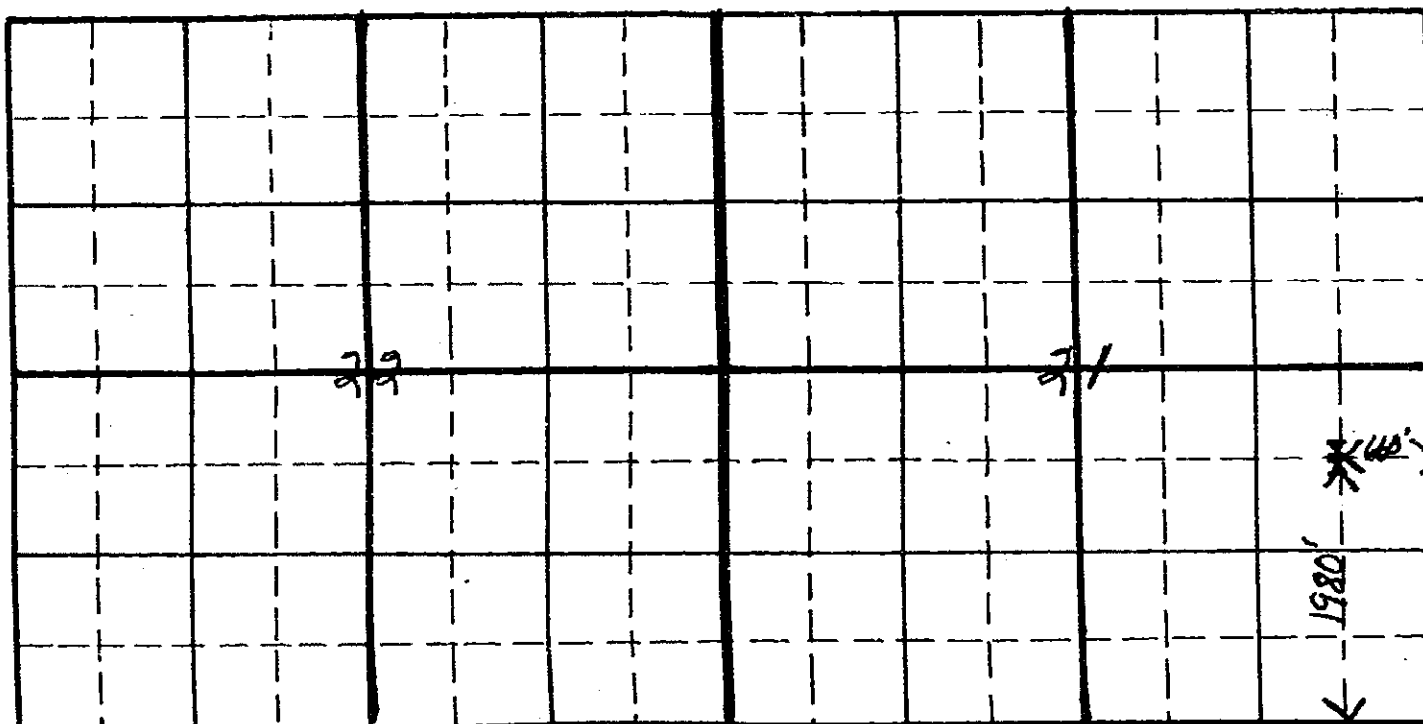


KERR MCGEE OIL INDUSTRIES INC.
NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 21, T18N-R25E

Kerr-McGee Oil Industries, Inc. HORTENSTINE B-1
C NE SE Section 21, 18N, 25E, Apache County, Arizona.
660' FEL and 1980' FSL of Section 21, 18N, 25E, Apache County, Arizona.

A certified plat will follow by mail.

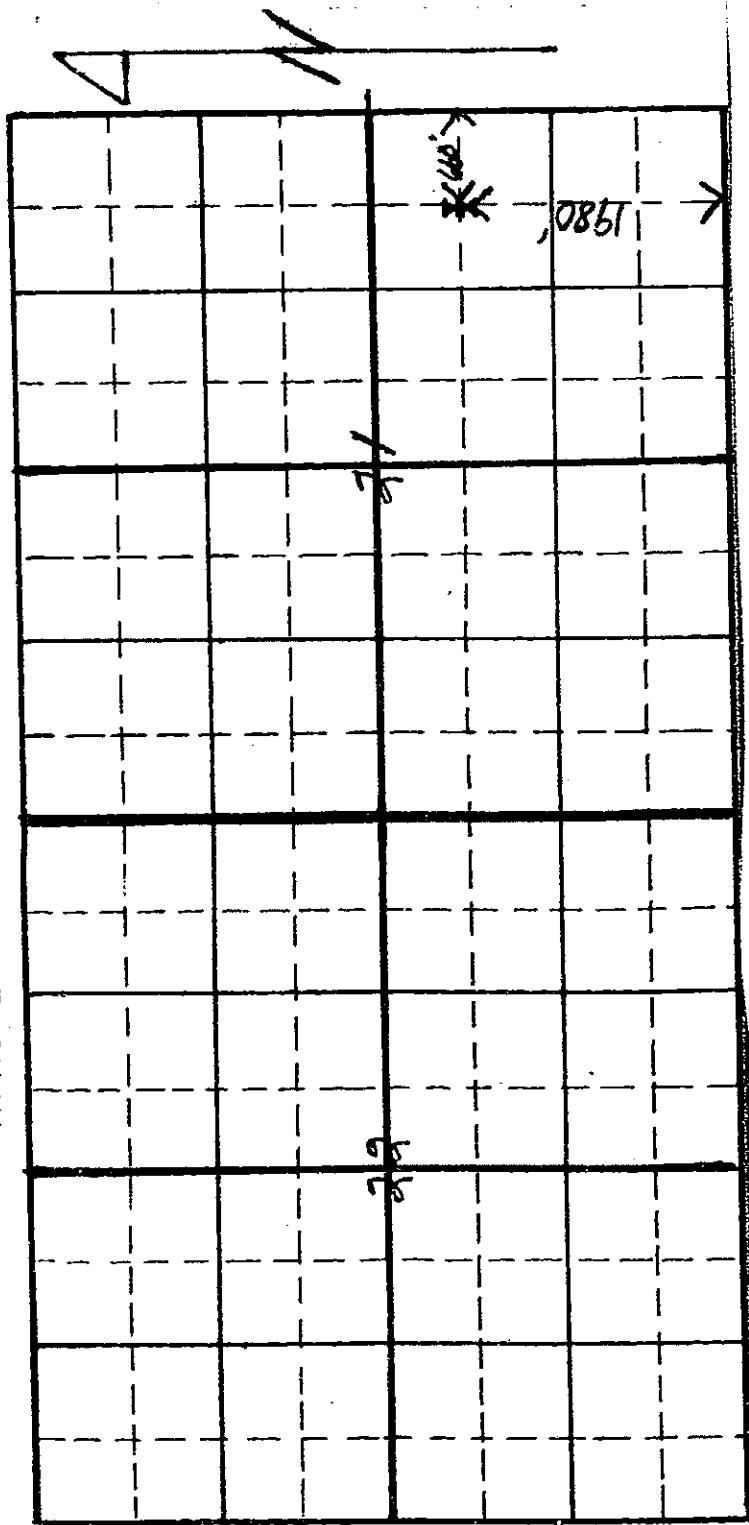
APACHE COUNTY, ARIZONA

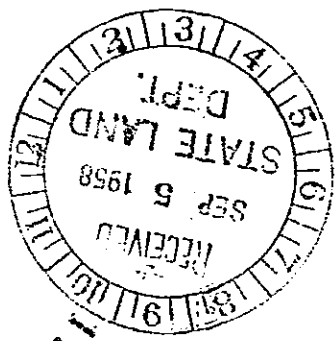


Kerr-McGee Oil Industries, Inc. HORTENSTINE B-1
C NE SE Section 21, 18N, 25E, Apache County, Arizona.
660' FEL and 1980' TSL of Section 21, 18N, 25E, Apache County, Arizona.

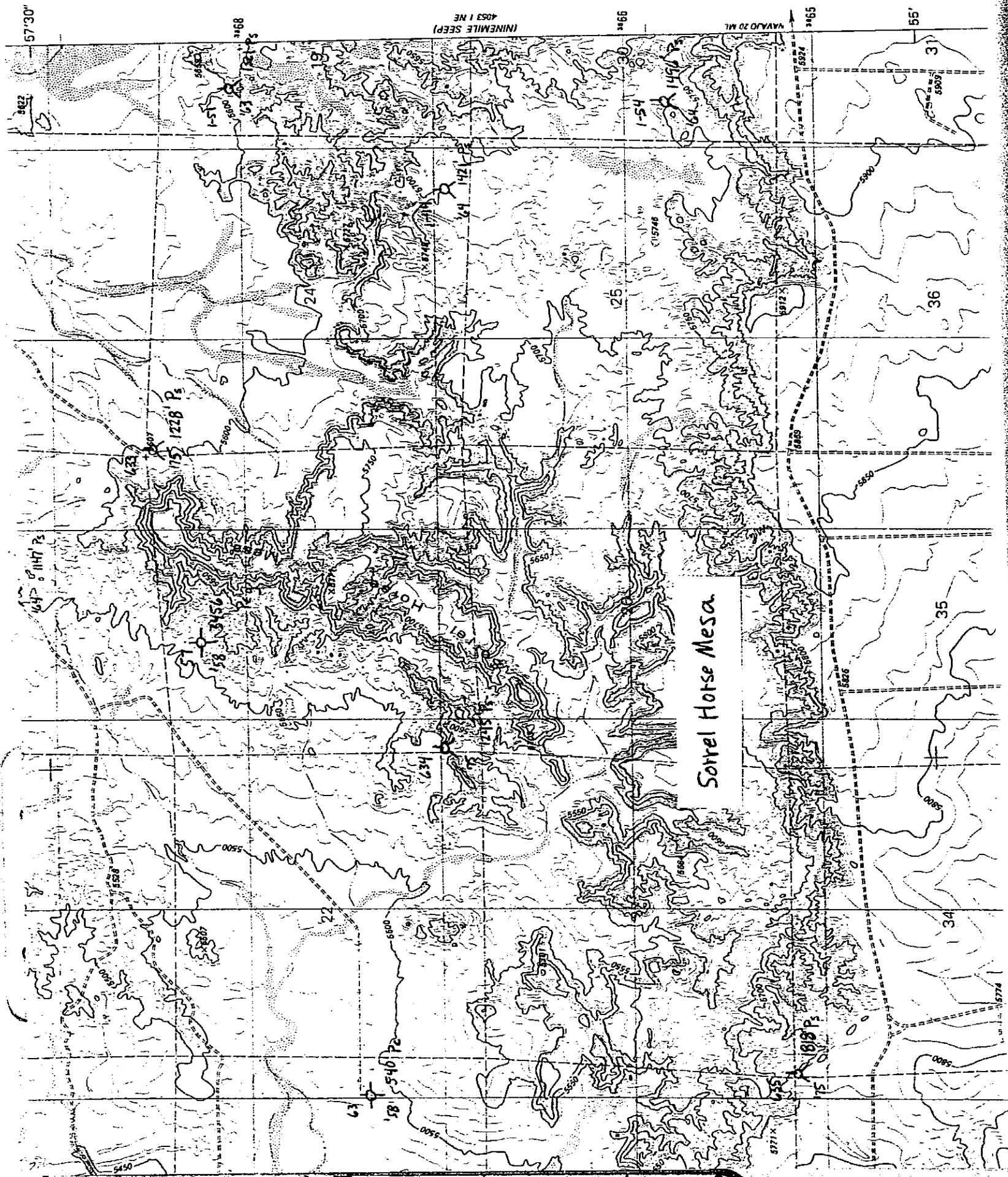
A certified plat will follow by mail.

APACHE COUNTY, ARIZONA





13594



Operator KERR MC GEE ~~OIL~~ ^{Corporation} ~~INDUSTRIES INC.~~

Bond Company Insurance Co. of N. America Amount 25,000

Bond No. M 41 95 25 (KN528) Date Approved 10-28-65

Permits covered by this bond:

10	386	417
36	389	418
37	390	419
38	391	420
39	392	422
57	396	426
63	397	427
64	398	441
142	399	445
238	402	446
303	403	→ see this file
90	404	
91	405	
349	406	
303	407	
377	408	
378	409	
379	410	
380	411	
381	413	
384	414	
385	416	

Superseded by
American Casualty Co. Bond
\$25,000
#5471020-52

CANCELLED

DATE 10-24-68

Operator Kerr-McGee Industries, Inc.

Bond Company Indemnity Ins. Co. of North America Amount \$10,000

Bond No. M 246435 Date Approved 8-1-60

Permits covered by this bond:

*Now covered
by bond
M 419525*

10

see this file

39

142

57

63

90

64

238

36

37

38

91

303

CANCELLED

DATE 10-28-65

September 15, 1958

Mr. Otto Barton
Kerr-McGee Oil Ind. Inc.,
Box 337
Sunray, Texas

Dear Mr. Barton:

In line with your previous request that all correspondence and documents be directed to you, we are inclosing surplus copies of our form O&G 51, Notice of Intention to Drill New Well for your drilling operation in Section 21, Township 18 North, Range 25 East, Apache County, Arizona.

These papers were submitted to this Department by Mr. O. L. Lines, Division Superintendent of the Sunray office and were signed by a Mr. David E. Smith. Since our files do not show a Mr. Smith as authorized to sign any instruments for the Kerr-McGee Company, we are asking that the inclosed Organization Report be submitted to this office, showing the names of the agents qualified to sign important papers.

Also inclosed is your receipt in the amount of \$25.00 covering the above permit.

Thank you very much for your cooperation in the matter.

Very truly yours,

STATE LAND COMMISSIONER

By: Frederick C. Ryan,
Supervisor,
Oil and Gas Conservation

mb
Encls.

KERR-McGEE OIL INDUSTRIES, INC.

Kerr-McGee Building • Oklahoma City 2, Oklahoma

Sunray, Texas
3 September 1958

State Land Department
State of Arizona
Phoenix, Arizona

Attention: Mr. Duncan

Dear Sir:

Enclosed please find 4 copies of Form OG 51, Notice Of Intention To Drill New Well and 4 copies of plat for the Hortenstine B-1, located in Section 21, 18N, 25E, Apache County, Arizona. A certified plat will follow by mail.

Enclosed is a draft for \$25.00 covering the filing fees. Please insert one copy of the above form in this draft.

When these forms have been approved, please return the surplus copies to this office.

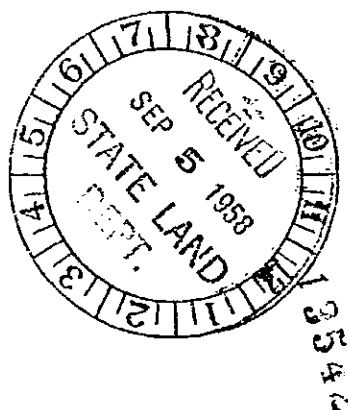
Yours truly,

KERR-McGEE OIL INDUSTRIES, INC.

O L Limes

O. L. Limes
Division Supt.
Box 337
Sunray, Texas

OLL-m



STATE OFFICE BUILDING — PHOENIX, ARIZONA

**Box 337
Surrey, Texas**

SECTION	TOWNSHIP	RANGE
21	28 N	25 E

TOTAL AMOUNT	\$	25.00
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DATE OF PAYMENT IS MADE ON OR BEFORE THIS DATE

SEE OTHER SIDE FOR LAW PERTAINING TO PENALTY AND INTEREST - A. C. 1939. 11-307

SEE OTHER SIDE FOR LAW PERTAINING TO PENALTY AND INTEREST
SEE OTHER SIDE FOR LAW PERTAINING TO PENALTY AND INTEREST IF NOT PAID ON OR BEFORE DATE DUE . . . (\$

RENTAL AMOUNT SUBJECT TO PENALTY AND INTEREST IF NOT PAID	\$
5% PENALTY OF RENTAL AMOUNT	\$

PENALTY AND INTEREST	DISTRIBUTION	TOTAL PENALTY AMOUNT PLUS PENALTY -	(\$
)

PENALTY AND INTEREST		TOTAL RENTAL AMOUNT		10% INTEREST PER ANNUM OF RENTAL AMOUNT	

[illegible]

	NUMBER OF DAYS	AND PENALTY
TOTAL AMOUNT DUE INCLUDING PENALTY AND INTEREST \$		

TOTAL AMOUNT DUE INSURANCE			\$
CASH RECEIVED			

CASH RECEIVED					\$
BALANCE DUE OR OVERPAYMENT					

					BALANCE DUE ON OVERNIGHT
--	--	--	--	--	--------------------------

1. The first part of the document is a title page. It contains the title "The Role of the State in the Development of the Economy" and the author's name "John Doe".

2. The second part is the abstract. It summarizes the main points of the document, stating that the state plays a crucial role in the development of the economy, particularly in the areas of infrastructure, education, and healthcare.

3. The third part is the introduction. It discusses the importance of the state in the development of the economy and the challenges it faces. It also mentions the author's research methodology, which is based on a combination of theoretical analysis and empirical data.

4. The fourth part is the main body of the document. It is divided into several sections, each focusing on a different aspect of the state's role in the economy. The first section discusses the state's role in the provision of public goods, such as infrastructure and education. The second section discusses the state's role in the regulation of the market, particularly in the areas of competition and consumer protection. The third section discusses the state's role in the provision of social services, such as healthcare and social security.

5. The fifth part is the conclusion. It summarizes the main findings of the document and offers some recommendations for the future. It states that the state should continue to play a central role in the development of the economy, particularly in the areas of infrastructure, education, and healthcare.

6. The sixth part is the bibliography. It lists the sources used by the author in the document, including books, articles, and websites.

7. The seventh part is the appendix. It contains additional information that is not included in the main body of the document, such as data tables and figures.

8. The eighth part is the index. It provides a list of keywords and their corresponding page numbers, making it easier for the reader to find specific information in the document.

9. The ninth part is the cover page. It contains the title, author's name, and a small image of the author.

10. The tenth part is the back cover. It contains the title, author's name, and a small image of the author.

6



Year	Actual (%)	Projected (%)
1950	7.0	7.0
1960	7.5	7.5
1970	8.0	8.0
1980	8.5	8.5
1990	9.0	9.5
2000	9.5	10.5
2010	10.0	12.0
2020	10.5	14.0
2030	11.0	16.0
2040	11.5	18.0
2050	12.0	19.5

3